

JPW 1743
PTO/SB/21 (02-04)**TRANSMITTAL
FORM**

(to be used for all correspondence after initial filing)

Application Number	09/998,600
Filing Date	November 16, 2001
First Named Inventor	Unger, Marc A.
Art Unit	1743
Examiner Name	Gordon, Brian R.
Attorney Docket Number	020174-003310US

Total Number of Pages in This Submission

ENCLOSURES (Check all that apply)

- | | | |
|--|---|---|
| <input type="checkbox"/> Fee Transmittal Form
<input type="checkbox"/> Fee Attached
<input type="checkbox"/> Amendment/Reply
<input type="checkbox"/> After Final
<input type="checkbox"/> Affidavits/declaration(s)
<input type="checkbox"/> Extension of Time Request
<input type="checkbox"/> Express Abandonment Request
<input checked="" type="checkbox"/> Information Disclosure Statement
<input type="checkbox"/> Certified Copy of Priority Document(s)
<input type="checkbox"/> Response to Missing Parts/Incomplete Application
<input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53 | <input type="checkbox"/> Drawing(s)
<input type="checkbox"/> Licensing-related Papers
<input type="checkbox"/> Petition
<input type="checkbox"/> Petition to Convert to a Provisional Application
<input type="checkbox"/> Power of Attorney, Revocation
Change of Correspondence Address
<input type="checkbox"/> Terminal Disclaimer
<input type="checkbox"/> Request for Refund
<input type="checkbox"/> CD, Number of CD(s) _____ | <input type="checkbox"/> After Allowance Communication to Group
<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Status Letter
<input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):
Return Postcard, copies of one-hundred and twenty-eight (128) cited references |
|--|---|---|

Remarks

The Commissioner is authorized to charge any additional fees to Deposit Account 20-1430.

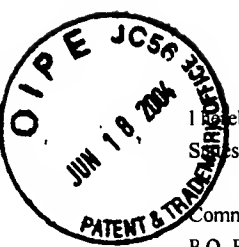
SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	Townsend and Townsend and Crew LLP Scott L. Auserhus	Reg. No. 42,271
Signature		
Date	6-16-04	

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

Typed or printed name	Nicole Wartell		
Signature		Date	6/16/04



I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to:

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

PATENT
Attorney Docket No.: 020174-003310US

On June 16, 2004

TOWNSEND and TOWNSEND and CREW LLP

By: Nicole Warten

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Marc A. Unger et al.

Application No.: 09/998,600

Filed: November 16, 2001

For: MICROFLUIDIC DEVICES FOR
INTRODUCING AND DISPENSING
FLUIDS FROM MICROFLUIDIC
SYSTEMS

Examiner: Gordon, Brian R.

Art Unit: 1743

SUPPLEMENTAL INFORMATION
DISCLOSURE STATEMENT UNDER 37
CFR §1.97 and §1.98

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

The references cited on attached form PTO/SB/08A and PTO/SB/08B are being called to the attention of the Examiner. Copies of the references are enclosed. It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

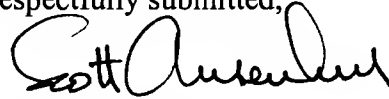
As provided for by 37 CFR 1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no

representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

Applicant believes that no fee is required for submission of this statement.

However, if a fee is required, the Commissioner is authorized to deduct such fee from the undersigned's Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,



Scott L. Ausenhus
Reg. No. 42,271

TOWNSEND and TOWNSEND and CREW LLP
Two Embarcadero Center, Eighth Floor
San Francisco, California 94111-3834
Tel: 303-571-4000
Fax: 303-571-4321
SLA:nmb
60199953 v1



INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)			Complete if Known		
			Application Number	09/998,600	
			Filing Date	November 16, 2001	
			First Named Inventor	Unger, Marc A.	
			Art Unit	1743	
Sheet	1	of	7	Examiner Name	Gordon, Brian R.
				Attorney Docket Number	020174-003310US

U.S. PATENT DOCUMENTS+					
Examiner Initials*	Cite No. ¹	Document Number Number Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	A1	US-3,570,515	03-16-1971	Kinner	
	A2	US-3,747,628	07-24-1973	Holster et al.	
	A3	US-4,046,159	09-06-1977	Pegourie	
	A4	US-4,119,368	10-10-1978	Yamakazi	
	A5	US-4,153,855	05-08-1979	Feingold	
	A6	US-4,245,673	01-20-1981	Bouteille et al.	
	A7	US-4,434,704	03-06-1984	Surjaatmadja	
	A8	US-4,898,582	02-06-1990	Faste	
	A9	US-5,085,562	02-04-1992	Van Lintel	
	A10	US-5,088,515	02-18-1992	Kamen	
	A11	US-5,096,388	03-17-1992	Weinberg	
	A12	US-5,126,115	06-30-1992	Fujita et al.	
	A13	US-5,164,558	11-17-1992	Huff et al.	
	A14	US-5,171,132	12-15-1992	Miyazaki	
	A15	US-5,224,843	07-06-1993	Van Lintel	
	A16	US-5,259,737	11-09-1993	Kamisuki et al.	
	A17	US-5,265,327	11-30-1993	Faris et al.	
	A18	US-5,290,240	03-01-1994	Horres, Jr.	
	A19	US-5,336,062	08-09-1994	Richter	
	A20	US-5,346,372	09-13-1994	Naruse et al.	
	A21	US-5,375,979	12-27-1994	Trah	
	A22	US-5,376,252	12-27-1994	Ekstrom	
	A23	US-5,400,741	03-28-1995	DeTitta et al.	
	A24	US-5,423,287	06-13-1995	Usami et al.	
	A25	US-5,529,465	06-25-1996	Zengerle et al.	
	A26	US-5,593,130	01-14-1997	Hansson et al.	
	A27	US-5,642,015	06-24-1997	Whitehead et al.	
	A28	US-5,859,171	08-19-1997	Young et al.	
	A29	US-5,660,370	08-26-1997	Webster	
	A30	US-5,681,024	10-28-1997	Lisec et al.	
	A31	US-5,705,018	01-08-1998	Hartley	
	A32	US-5,743,960	04-28-1998	Tisone	
	A33	US-5,759,014	06-02-1998	Van Lintel	
	A34	US-5,775,371	07-07-1998	Pan et al.	
	A35	US-5,836,750	11-17-1998	Cabuz	
	A36	US-5,842,787	12-01-1998	Kopf-Sill et al.	
	A37	US-5,875,817	03-02-1999	Carter	
	A38	US-5,876,187	03-02-1999	Afromowitz	
	A39	US-5,932,799	08-03-1999	Moles	
	A40	US-5,942,443	08-24-1999	Parce et al.	
	A41	US-6,007,309	12-28-1999	Hartley	
Examiner Signature			Date Considered		

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² Kind Codes of U.S. Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

60199953 v1



INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)			Complete if Known		
			Application Number	09/998,600	
			Filing Date	November 16, 2001	
			First Named Inventor	Unger, Marc A.	
			Art Unit	1743	
Sheet	2	of	7	Examiner Name	Gordon, Brian R.
				Attorney Docket Number	020174-003310US

U.S. PATENT DOCUMENTS+					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Kind Code ² (if known)			
	A42	US-6,043,080	03-28-2000	Lipshutz et al.	
	A43	US-6,068,751	05-30-2000	Neukermans	
	A44	US-6,086,825	07-11-2000	Sundberg et al.	
	A45	US-6,090,251	07-18-2000	Sundberg et al.	
	A46	US-6,123,769	09-26-2000	Sanjoh	
	A47	US-6,155,282	12-05-2000	Zachary et al.	
	A48	US-6,174,365 B1	01-16-2001	Sanjoh	
	A49	US-6,296,673 B1	10-02-2001	Santarsiero et al.	
	A50	US-6,409,832 B1	06-25-2002	Weigl et al.	

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)				
	B1	EPO	EP 0 592 094	A2	04-13-1994			<input type="checkbox"/>
	B2	EPO	EP 0 703 364	A1	03-27-1996			<input type="checkbox"/>
	B3	EPO	EP 0 706 004	A2	04-10-1996			<input type="checkbox"/>
	B4	EPO	EP 0 779 436	A2	06-18-1997			<input type="checkbox"/>
	B5	EPO	EP 0 829 360	A2	03-18-1998			<input type="checkbox"/>
	B6	EPO	EP 0 845 603	A1	06-03-1998			<input type="checkbox"/>
	B7	EPO	EP 0 999 055	A2	05-10-2000			<input type="checkbox"/>
	B8	GB	2 155 152	A	09-18-1985			<input type="checkbox"/>
	B9	GB	2 308 460	A	06-25-1997			<input type="checkbox"/>
	B10	PCT	WO 98/07069	A1	02-19-1998			<input type="checkbox"/>
	B11	PCT	WO 99/17093	A1	04-08-1999			<input type="checkbox"/>
	B12	PCT	WO 00/60345	A1	10-12-2000			<input type="checkbox"/>
	B13	PCT	WO 02/060582	A2	08-08-2002			<input type="checkbox"/>

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² Kind Codes of U.S. Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

60199953 v1



INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)			Complete if Known		
			Application Number	09/998,600	
			Filing Date	November 16, 2001	
			First Named Inventor	Unger, Marc A.	
			Art Unit	1743	
			Examiner Name	Gordon, Brian R.	
Sheet	3	of	7	Attorney Docket Number	020174-003310US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	C1	AHN et al., "Fluid Micropumps Based on Rotary Magnetic Actuators," Proceedings of 1995 IEEE Micro Electro Mechanical Systems Workshop (MEMS '95), held in Amsterdam, Netherlands on 1/29-2/2/1995, pgs. 408-412.	
	C2	BENARD et al., "A Titanium-Nickel Shape-Memory Alloy Actuated Micropump," Proceedings of Transducers '97, 1997 International Conference on Solid-State Sensors and Actuators, held in Chicago, Il., 6/16-19/1997, 1:361-364 (1997).	
	C3	BRECHTEL et al.; "Control of the electroosmotic flow by metal-salt-containing buffers", J Chromatography A, 1995, pp. 97-105, Vol. 716	
	C4	BRYZEK et al.; "Micromachines on the March", IEEE Spectrum, 1994, pp. 20-31, Vol. 31, No. 5	
	C5	BUCHAILLOT et al.; "Silicon nitride thin films Young's modulus determination by an optical non-destructive method", Jpn. J Appl Phys, 1995, pp. L794-L797, Vol. 36, No. 2:6B	
	C6	CHIU et al.; "Patterned Deposition of Cells and Proteins onto Surfaces by Using Three-Dimensional Microfluidic Systems", Proc. Natl. Acad. Sci., 2000, pp. 2408-2413, Vol. 97, No. 6	
	C7	CHOU et al. "A microfabricated device for sizing and sorting DNA molecules", Applied Physical Sciences, Biophysics, Proc. Natl. Acad. Sci., 1999, pp. 11-13, Vol. 96, U.S.A.	
	C8	DELAMARCHE et al.; "Patterned delivery of immunoglobulins to surfaces using microfluidic networks", Science, 1997, pp. 779-781, Vol. 276	
	C9	DUFFY et al. "Patterning Electroluminescence Materials with Feature Sizes as Small as 5µm Using Elastomeric Membranes as Masks for Dry Lift-Off", Advanced Materials, 1999, pp. 546-552, Vol. 11, No. 7	
	C10	DUFFY et al. "Rapid Prototyping of Microfluidic Switches in Poly(dimethylsiloxane) and Their Actuation by Electro-Osmotic Flow" Journal of Microeng, 1999, pp. 211-217, Vol. 9	
	C11	DUFFY et al. "Rapid Prototyping of Microfluidic Systems in Poly(dimethylsiloxane)", Analytical Chemistry, 1998, pp. 4974-4984, Vol. 70, No. 23.	
	C12	EFFENHAUSER et al.; "Integrated capillary electrophoresis on flexible silicone microdevices: Analysis of DNA restriction fragments and detection of single DNA molecules on microchips", Anal. Chem, 1997, pp. 3451-3457, Vol. 69.	
	C13	EFFENHAUSER et al.; "Integrated chip-based capillary electrophoresis", Electrophoresis, 1997, pp. 2203-2213, Vol. 18	
	C14	FAHRENBURG et al. "A microvalve system fabricated by thermoplastic molding", J Micromech Microeng, 1995, pp.169-171, Vol. 5	
Examiner Signature		Date Considered	

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.



INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)			Complete if Known		
			Application Number	09/998,600	
			Filing Date	November 16, 2001	
			First Named Inventor	Unger, Marc A.	
			Art Unit	1743	
			Examiner Name	Gordon, Brian R.	
Sheet	4	of	7	Attorney Docket Number	020174-003310US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	C15	FU et al.; "A microfabricated fluorescence-activated cell-sorter", Nature Biotechnology, 1999, pp. 1109-1111, Vol. 17	
	C16	GASS et al., "Integrated flow-regulated silicon micropump," Sensors and Actuators A Physical, 1994, p. 335-338, Vol. 43.	
	C17	GERLACH, T., "Pumping Gases by a Silicon Micro Pump with Dynamic Passive Valves," Proceedings of Transducers '97, 1997 International Conference on Solid-State Sensors and Actuators, held in Chicago, IL, 6/16-19/1997, pp. 357-360, Vol. 1.	
	C18	GOLL et al., "Microvalves with bistable buckled polymer diaphragms," J. Micromech. Microeng., 1996, pp.77-79, Vol. 6	
	C19	GRAVESEN et al.; "Microfluids- A Review", Journal Micromech Microeng, 1993, pp. 168-192, Vol. 3	
	C20	HARRISON et al., "Micromachining a Miniaturized Capillary Electrophoresis-Based Chemical Analysis System on a Chip," Science, 1993, pp.895-897, Vol. 261	
	C21	HORNBECK et al., "Bistable Deformable Mirror Device," Spatial Light Modulators and Applications 1988 Technical Digest Series, Volume 8, Postconference Edition, Summaries of papers presented at the Spatial Light Modulators and Applications Topical Meeting, June 15-17, 1988, Optical Society of America, pgs. 107-110.	
	C22	HOSOKAWA et al., "Handling of Picoliter Liquid Samples in a Poly(dimethylsiloxane)-Based Microfluidic Device," Anal. Chem., 1999, 71(20):4781-4785	
	C23	IKUTA et al., "Three dimensional micro integrated fluid systems (MIFS) fabricated by stereo lithography," IEEE Kyushu Institute of Technology, 1994, pp. 1-6.	
	C24	JACOBSON et al., "High-speed separations on a microchip," Anal. Chem., 1994, 66(7):1114-1118.	
	C25	JACOBSON et al., "Microfluidic Devices for Electrokinetically Driven Parallel and Serial Mixing," Anal. Chem., 1999, 71(20):4455-4459.	
	C26	JERMAN, H., "Electrically-Activated, Normally-Closed Diaphragm Valves," Proceedings of Transducers '91, 1991 International Conference on Solid-State Sensors and Actuators, pages 1045-1048 (1991).	
	C27	JUNG et al., "Chemical and Physical Interactions at Metal/Self-Assembled Organic Monolayer Interfaces," Critical Reviews in Solid State and Material Sciences, 1994, pp. 2-10, Vol. 19, No. 1.	
	C28	KENIS et al. "Microfabrication Inside Capillaries Using Multiphase Laminar Flow Patterning," Science, 1999, 285:83-85.	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.



Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)			Complete if Known		
			Application Number	09/998,600	
			Filing Date	November 16, 2001	
			First Named Inventor	Unger, Marc A.	
			Art Unit	1743	
			Examiner Name	Gordon, Brian R.	
Sheet	5	of	7	Attorney Docket Number	020174-003310US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	C29	KIM, ENOCH et al., "Micromolding in Capillaries: Applications in Material Science," J. American Chemical Society, 118:5722-5731 (1996).	
	C30	KOPP et al. "Chemical Amplification: Continuous-Flow PCR on a Chip", Science, 1998, 280:1046-1048.	
	C31	KUHN et al. "Silicon Charge Electrode Array for Ink Jet Printing", IEEE Transactions on Electron Devices, 1978, pp. 1257-1260, Vol. ED-25, No. 10.	
	C32	LIN et al. "Free-Space Micromachined Optical Switches for Optical Networking," IEEE J. Selected Topics in Quantum Electronics, 1999, pp. 4-9, Vol. 5, No. 1.	
	C33	LÖTTERS et al. "The mechanical properties of the rubber elastic polymer polydimethylsiloxane for sensor applications," J. Micromech. Microeng., 1997, 7:145-147.	
	C34	LUCY et al., "Characterization of the Cationic Surfactant Induced Reversal of Electroosmotic Flow in Capillary Electrophoresis," Anal. Chem., 1996, pp. 300-305, Vol. 68.	
	C35	MALUF, N., An Introduction to Microelectromechanical Systems Engineering, Artech House Publishers, Boston London pages 42-45.	
	C36	MULLER et al., "Surface-Micromachined Microoptical Elements and Systems," Proceedings of IEEE, 1998, 86(8):1705-1720.	
	C37	OLSSON et al., "Simulation Studies of Diffuser and Nozzle Elements for Valve-less Micropumps," Proceedings of Transducers '97, 1997 International Conference on Solid-State Sensors and Actuators, held in Chicago, IL, 6/16-19/1997, 2:1039-1042 (1997).	
	C38	MARKX et al. "Applications of dielectrophoresis in biotechnology," Tibtech, 15:426-432 (1997).	
	C39	QIN et al., "Photolithography with transparent reflective photomasks," J. Vac.Sci. Technology, 16(1):98-103 (1998).	
	C40	QIN et al., "Elastomeric Light Valves***", Adv. Mater., 1997, pp.407-410, Vol. 9, No. 5.	
	C41	QUAKE S.R. and SCHERER A.; "From Micro- to Nanofabrication with Soft Materials", Science, November 24, 2000; pp. 1536-1540, Vol. 290, No. 5496.	
	C42	RAPP. R., "LIGA micropump for gases and liquids," Sensors and Actuators A, 1994, pp.57-61, Vol. 40.	
	C43	ROYLANCE et al., "A Batch-Fabricated Silicon Accelerometer", IEEE Transactions on Electron Devices, December 1979, pp. 1911-1917, Vol. ED-26, No. 12.	

Examiner Signature	Date Considered
--------------------	-----------------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.



Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Complete if Known	
Application Number				09/998,600	
Filing Date				November 16, 2001	
First Named Inventor				Unger, Marc A.	
Art Unit				1743	
Examiner Name				Gordon, Brian R.	
Attorney Docket Number				020174-003310US	
Sheet	6	of	7		

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	C44	SCHASFOORT et al., "Field-Effect Flow Control for Microfabricated Fluidic Networks," Science, 1999, 286:942-945.	
	C45	SCHUELLER et al., "Fabrication of glassy carbon microstructures by soft lithography," Sensors and Actuators, 72(2):125-139 (1999).	
	C46	SHOJI et al., "Smallest Dead Volume Microvalves for Integrated Chemical Analyzing Systems", Proceedings of Transducers '91, 1991, pp. 1052-1055, San Francisco	
	C47	SHOJI, S., "Fluids for Sensor Systems", Topics in Current Chemistry, 1998, pp. 162-188, Vol. 194, Springer Verlag Berlin Heidelberg.	
	C48	SMITS, J.G., "Piezoelectric Micropump with Three Valves Working Peristaltically", Sensors and Actuators, 1990, pp. 203-206, Vol. A21-A23.	
	C49	SOHN et al., "Capacitance cytometry: Measuring biological cells one by one," PNAS, 97(20):10687-10690 (2000).	
	C50	TUFTE et al., "Silicon Diffused-Element Piezoresistive Diaphragms," J. Appl. Phys., November 1962, pp. 3322-3327, Vol. 33, No. 11.	
	C51	Ullmann's Encyclopedia of Industrial Chemistry, Sections 6 to 6.3, Topic: Carbon Black, Sixth Edition, 1999	
	C52	UNGER, MARC A. et al. "Monolithic Microfabricated Valves and Pumps by Multilayer Soft Lithography" Science, 07 April 2000, Vol. 288, 113-116	
	C53	VAN DE POL et al., "Micro Liquid Handling Devices - A Review", Micro Systems Technologies, 1990, pp. 799-805, Vol. 90.	
	C54	VAN DE POL, F.C.M. et al. "A Thermo-Pneumatic Actuation Principle for a Microminiature Pump and Other Micromechanical Devices" Sensors and Actuators, 3 May 1989, pp. 139-143, Vol. 17, Nos. 1-2.	
	C55	VIEIDER et al., "A Pneumatically Actuated Micro Valve with a Silicon Rubber Membrane for Integration with Fluid Handling Systems", Proceedings of Transducers '95, the 8th International Conference on Solid-State Sensors and Actuators and Eurosensors IX, held in Stockholm, Sweden on 6/25-29/95, 1995, pp. 284-286, Stockholm, Sweden.	
	C56	WASHIZU et al., "Molecular Dielectrophoresis of Biopolymers," IEEE Transactions on Industry Applications, 1994, 30(4):835-843.	
	C57	XIA et al., "Complex Optical Surfaces Formed by Replica Molding Against Elastomeric Masters," Science, 1996, 273:347-349.	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.



INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)			Complete if Known		
			Application Number	09/998,600	
			Filing Date	November 16, 2001	
			First Named Inventor	Unger, Marc A.	
			Art Unit	1743	
			Examiner Name	Gordon, Brian R.	
Sheet	7	of	7	Attorney Docket Number	020174-003310US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	C58	XIA et al., "Soft Lithography," Angew. Chem. Int. Ed., 1998, 37:551-575.	
	C59	XIA, Y. et al., "Micromolding of Polymers in Capillaries: Applications in Microfabrication," Chemistry of Materials, 8(7):1558-1567 (1996).	
	C60	YANG et al. "A Mems Thermopneumatic Silicone Membrane Valve", Proceedings of IEEE, 10th Annual International Workshop on MicroElectro Mechanical Systems, Sensors and Actuators, 1998, A64(1):101-108.	
	C61	YANG et al., "A MEMS Thermopneumatic silicone Membrane Valve," Proceedings of the IEEE 10th Annual Workshop of Micro Electro Mechanical Systems Workshop (MEMS '97), held 1/26-30/1997 in Nagoya, Japan, pages 114-118.	
	C62	YAZDI et al. "Micromachined Inertial Sensors," Proceedings of IEEE, 1998, 86(8):1640-1659.	
	C63	YOUNG et al. "Contoured elastic-membrane microvalves for microfluidic network integration," J. Biomechanical Engineering, 1999, 121:2-6.	
	C64	Zengerle et al., "A Micro Membrane Pump with Electrostatic Actuation," 1992 IEEE Conf. on Micro Electro Mechanical Systems, held 2/4-7/92 in Travemunde Germany, pgs. 19-24.	
	C65	Zengerle et al., "Performance Simulation of Microminiaturized Membrane Pumps," from 7th International Conference on Solid-State Sensors and Actuators held 6/7-10/93 in Yokohama Japan, pages 106-109.	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.